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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/688,834

10/17/2000

Toshio Koga

Q60831

1858

7590 03/30/2009  
SUGHRUE, MION, ZINN, MACPEAK & SEAS  
2100 Pennsylvania Avenue, N.W.  
Washington, DC 20037

EXAMINER

MEINECKE DIAZ, SUSANNA M

ART UNIT

PAPER NUMBER

3692

MAIL DATE

DELIVERY MODE

03/30/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

1  
2 UNITED STATES PATENT AND TRADEMARK OFFICE  
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4  
5 BEFORE THE BOARD OF PATENT APPEALS  
6 AND INTERFERENCES  
7

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9 *Ex parte* TOSHIO KOGA  
10

11  
12 Appeal 2009-0815  
13 Application 09/688,834  
14 Technology Center 3600  
15

16  
17 Decided<sup>1</sup>: March 30, 2009  
18  
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21 Before MURRIEL E. CRAWFORD, HUBERT C. LORIN and DAVID B.  
22 WALKER, *Administrative Patent Judges*.  
23 CRAWFORD, *Administrative Patent Judge*.  
24

25 DECISION ON APPEAL  
26

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<sup>1</sup> The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the decided date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

1 Appellant appeals under 35 U.S.C. § 134 (2002) from a final rejection  
2 of claims 1 to 7. We have jurisdiction under 35 U.S.C. § 6(b) (2002).

3  
4 STATEMENT OF CASE

5 Appellant invented a vehicle onboard electronic toll collection  
6 apparatus which includes a decision means for making a decision on when to  
7 start collection information communication based on the detected speed of  
8 the vehicle and the measured reception field intensity. (Specification 1, 6).

9 Claim 1 under appeal reads as follows:

- 10 1. A vehicle-onboard electronic toll collection apparatus,  
11 comprising:  
12 (a) vehicle speed detecting means for detecting a speed of  
13 a motor vehicle which passes through a toll gate station equipped with  
14 an electronic toll collection system;  
15 (b) communication means for exchanging electronic toll  
16 collection information for settlement of toll charge/payment  
17 transaction with said toll gate station upon passing through said toll  
18 gate station;  
19 (c) measuring means for measuring reception field intensity of  
20 the received electronic toll collection information within a  
21 communication coverage area; and  
22 (d) decision means for making decision on the basis of said  
23 detected vehicle speed and said measured reception field intensity as  
24 to a location within said communication coverage area where  
25 electronic toll collection information communication can be started  
26 while sustaining favorable reception field intensity at said detected  
27 vehicle speed, to thereby allow said communication means to perform  
28 communication processing on the basis of result of said decision,  
29 wherein said vehicle-onboard electronic toll collection  
30 apparatus comprises elements (a)-(d), and  
31 wherein said elements (a)-(d) are provided on a vehicle.  
32

33 The Examiner rejected claims 1 to 5 under 35 U.S.C. § 103(a) as  
34 being unpatentable over Fuyama '376.

1 The Examiner rejected claims 6 and 7 under 35 U.S.C. § 103(a) as  
2 being unpatentable over Fuyama '376 and Fuyama '267.

3 The prior art relied upon by the Examiner in rejecting the claims on  
4 appeal is:

5 Fuyama	US 6,259,376 B1	Jul. 10, 2001
6 Fuyama	US 6,834,267 B1	Dec. 21, 2004

7  
8 ISSUE

9 Has Appellant shown that the Examiner erred in finding that Fuyama  
10 '376 discloses a decision means for making a decision on when to start  
11 collection information communication based on the detected speed of the  
12 vehicle and the measured reception field intensity?

13  
14 FINDINGS OF FACT

15 Fuyama '376 discloses a vehicle-onboard electronic toll collection  
16 apparatus that includes a first sensor s1 and a second sensor s2 (Figure 1).  
17 Fuyama '376 discloses that one of the problems associated with electronic  
18 toll devices is that two vehicles may communicate with the communication  
19 portion 17 of the toll apparatus at the same time because the first vehicle is  
20 traveling at a slow speed and thus the two vehicles are in the communication  
21 area 29 at the same time (col. 4, ll. 63 to 66). To solve this problem, the  
22 Fuyama '376 device starts communication with a vehicle traveling less than  
23 30 kilometers per hour after the vehicle has passed sensor s1 and after a  
24 predetermined time interval as measured by a timer 26 has elapsed.  
25 However, if the vehicle is traveling so fast that it will reach the sensor s2

1 before the predetermined time interval has elapsed, i.e. if the vehicle is  
2 traveling faster than 30 kilometers per hour, communication begins when the  
3 vehicle has reached the sensor s2 (col. 5, ll. 30 to 50). There is no exact  
4 speed detected as such, but the speed of the vehicle is related to whether the  
5 predetermined time interval has elapsed before the vehicle reaches sensor s2  
6 or not.

7 In addition, there is no decision made based on the speed of the  
8 vehicle and the measured reception field intensity as to a location where the  
9 electronic toll collection information communication can be started. Rather,  
10 the start of electronic toll collection is triggered by a predetermined time  
11 interval after the vehicle passes sensor s1 or by the vehicle reaching sensor  
12 s2.

#### 14 PRINCIPLES OF LAW

15 In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the  
16 Examiner to establish a factual basis to support the legal conclusion of  
17 obviousness. See *In re Fine*, 837 F.2d 1071, 1073 (Fed. Cir. 1988).

#### 19 ANALYSIS

20 We will not sustain the rejections of the Examiner. The Appellant and  
21 Examiner disagree on whether Fuyama '376 discloses a vehicle speed  
22 detection means and whether Fuyama '376 discloses the claimed decision  
23 means. Even if the Examiner is correct that the sensor arrangement of  
24 Fuyama '376 detects the speed of a vehicle, Fuyama '376 does not disclose  
25 the decision means that makes a decision as to where within the

1 communication coverage area to start the communication of toll collection  
2 information based on the reception field intensity and the detected vehicle  
3 speed. Rather, in Fuyama '376, when a car is moving slowly, less than 30  
4 kilometers per hour, the communication is begun after a predetermined time  
5 has elapsed. The decision to start communication is not dependent on the  
6 reception field intensity and is not related to a location of the vehicle within  
7 the communication coverage area. When a car is moving fast, more than 30  
8 kilometers per hour, communication is always begun when the vehicle  
9 reaches the second sensor s2 and is not dependent on the reception field  
10 intensity.

11 In view of the foregoing, we will not sustain the Examiner's rejection  
12 of claim 1 and claims 2 to 5, dependent thereon, under 35 U.S.C. § 103(a) as  
13 being unpatentable over Fuyama '376. We will also not sustain the  
14 Examiner's rejection of claims 6 and 7 under 35 U.S.C. § 103(a) as being  
15 unpatentable over Fuyama '376 and Fuyama '267, because the Examiner  
16 relies on Fuyama '376 for teaching the claimed decision means.

17  
18 CONCLUSION OF LAW

19 On the record before us, Appellant has shown that the Examiner erred  
20 in rejecting the claims on appeal.

21  
22 DECISION

23 The decision of the Examiner is reversed.

24  
25 REVERSED

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